

Work Order ID 85145

June-04-12 1:27:46 PM

85145

Page 1

Item ID: D350-636-013

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube LH

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/04

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D2750	F								
D3492	C								
IIN-D350-636	I	X SP.							
100		0.00							

100

DOCUMENT CONTROL

DC

Memo

0.00

DAS
16
7/4/27

Document Control

Photocopy blue file and type labels per PPP D350-636-013 CHG 006

JF for MLJ (12-7-26)

85145

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

Item ID: D350-636-013

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N900040100

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NS1

Revision ID:

Item Name: Skidtube LH

Stop

NS2

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

110

Skidtubes

Skidtubes

0.00

Memo

0.00

1- Pick D2600-3 Bent

*BE 12/06/28*2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside
AFT end per dwg D2750*BE 12/06/28*3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500",
debur.*7
SAD 12-06-28*4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade
fitting*8E 12/06/28*

5- Drill only two fwd step holes using DT9616. Ensure proper positioning.

*7
SAD 12-06-28*6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-3 details).Drill using drill
Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE8- Open up holes for SECTION AW-AW to 0.375" (2 holes per side) and blade
fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750.
Open holes for ground handling and detail T to 0.500" (8 holes per side)9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to
0.297".

10-Open up holes of Detail A to 0.297" (total of 2 holes per side)

>BB 12/06/28

W/O:		WORK ORDER CHANGES					
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Item Name: Skidtube LH

Stop

NS2

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left, from bending as per QSI 004 A/R Aluminum Rod batch: <u>m122130</u>	<u>BE 2/6/28</u>							
	12-Grind welds flush as per Dwg D2750	<u>SAD 12.06-28</u>							
130 *130* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 <u>8/10/10</u>							
	QC5- Inspect part completeness to step on W/O Memo	0.00 <u>8/21/10</u>							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube LH

Stop

NS2

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
160	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes section AW-AW 0.500" (4 per side) as per dwg D2750								
	3-Open up holes of Detail T and ground handling to 0.625" (total of 8 holes per side Detail AV-AV) as per dwg D2750.								
	4-Chamfer holes of section AW-AW, AV-AV, T and ground handling. (welding instructions on sheet 10)								
	5-Deburr and blow out all chips from inside of tube. Prepare tube for welding, remove alodine as required.								
	6-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>M121407</u> exp. date: <u>13-04-12</u>								
	7- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 10) A/R Aluminum Rod batch: <u>M122130</u>								
	8-Grind welds flush as per Dwg D2750								
	9-Spot face ground handling holes (total of 4 places per side) as per dwg D2750								
	10-Deburr holes								

3 12/07/06 -

2 5 SAD 12-07-08

2E 12/6/09

3 8/24/07/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID 85145

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Item ID: D350-636-013

Revision ID:

Item Name: Skidtube LH

Start Date: 04/06/2012 **Start Qty:** 1.00 ***1***

Required Date: 18/06/2012 **Req'd Qty:** 1.00 ***1***

Reference:

Approvals: **Process Plan:** _____ **Date:** _____
QC: _____ **Date:** _____

Sequence ID/
Work Center ID 170 **Operation**
Description QC10- Inspect visual per QSI004- ground welds
170
QC
Quality Control

180 QC5- Inspect part completeness to step on W/O
180
QC
Quality Control

190 Pressure Wash per QSI005 4.3
190
HandFinish
Hand Finishing

Accept

85145

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Tooling: _____ Date: _____
SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

0.00 *(p) 12-7-12 S*
0.00 *7/18/23*

0.00 *(p) 12-7-12 (DAS*
0.00 *16*
7/18/23

1 p 12-7-23.

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D350-636-013

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube LH

Stop

NS2Start Date: 04/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Powder Coating

Memo

1:15
320 SP
1:45

0.00

1 X ✓

ML
12/07/23

210

QC3- Inspect Part Finish

0.00

210

QC

Quality Control

Memo

Inspect for foreign object per QSI 024

0.00

1 W+L ✓ 9L 11/07/23

220

220

HandFinish

HandFinishing

0.00

Hand Finishing

Memo

1-Install inserts as per dwg D2750

0.00

1 W+L ✓ 9L 11/07/23

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification: Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Work Order ID 85145

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Item ID: P350-636-013

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube LH

Start Date: 04/06/2012 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 18/06/2012 **Req'd Qty:** 1.00

* 1 *

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling

Date:

Ru

Start

ND1

OC:

Date:

SPC (Y/N)

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 *230* HandFinish Hand Finishing	HandFinishing Memo 1-Inspect for Foreign Objects 2-Spray inside of tube with "LPS-3" batch: <u>11/19</u> 3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: <u>10/139</u> EXP DATE: <u>11-3</u> . 4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>10/378</u> . 5-Coat all exposed fasteners with "LPS Procyon" batch: <u>11/596</u> .	0.00				1	0		BL D27-25
240 *240* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	DAS 16						

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85145

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Item ID: D350-636-013

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube LH

Stop

NS2

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center ID
250Operation
Description
Pick KitSet Up/
Run Hours
0.00Tool ID Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp***250***

Packaging

Packaging

SJ SF 12/7/2010 C

260

QC4- 100% Inspect kits for completeness

0.00

0.00 (DAS
15
9-69) (7/4/12)*RC****260***

QC

Quality Control

270

Packaging

0.00

270

Packaging

Packaging

Memo

Package as per PPP D350-636-013

0.00

*12/7/2010 C**I*

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 85145

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N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube LH

Stop

NS2Start Date: 04/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280 *280* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00							12/7/30 JJ

04-07-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Page 1

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Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

Comments: IPP Rev:H02.09.25Rearranged procedure steps KJ

IPP rev I 06.03.30 Per rev. D dwg EC

IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec IPP Rev:L

10.06.22 revise seq110 DD verf:EC IPP Rev:M 10.10.01 as
per IIN revH DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-3-BENT		Manufactured	No			110	Each	29.0000	1	1			**

D2600-3-BENT

Extrusion Bent

Location Loc Qty Loc Code

LG	29	
66875	7	
73253	1	
75021	1	
75022	1	
75023	1	
81330	4	
83305	1	
83442	13	

D3493-1

D3493-1

Washer

Manufactured No

110 Each 127.0000

2

**

Location Loc Qty Loc Code

ST050	127	
77573	1	
82023	26	
83097	100	

B 86330 BE 12/06/23

PP 12-7-26

2x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Work Order ID: 85145**Parent Item:** D350-636-013**Parent Item Name:** Skidtube LH***85145***
D350-636-013**Start Date:** 04/06/2012**Required Date:** 18/06/2012**Start Qty:** 1.00**Required Qty:** 1.00

D2739

Manufactured No

160

Each

13 0000

1

1

**

SAD

12-07-08

D2739

350 I Beam

Location Loc Qty Loc Code

LG	13	
72155	1	
81508	1	
83447	4	
83448	5	
83548	2	

B86615

①

D2744

Manufactured No

160

Each

35.0000

1

1

**

BE 12/06/28

D2744

Cap

Location Loc Qty Loc Code

LG002	35	
62715	1	
78900	3	
83412	31	

D3490-1

Manufactured No

160

Each

45.0000

4

4

**

BE 12/07/09
B85419 \$4***D3490-1***

Cross Bolt Spacer

Location Loc Qty Loc Code

LG	2	
81976	2	
LG001	43	
62450	2	
74875	4	
77042	3	
83269	34	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

D3490-5

Manufactured No 160 Each 57.0000 4 4

**

D3490-5

Cross Bolt Spacer

BB/12/07/09

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	LG	13	
	78958	13	
	LG001	44	
	83373	44	

D2743

Manufactured No 220 Each 296.0000 8 8

**

D2743

Crossbolt Spacer

BE/12/07/09

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	LG	222	
	81965	55	
	83262	167	
	LG001	74	
	67766	4	
	68251	3	
	73403	64	
	74445	1	
	79517	2	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Purchased

No

230

Each

781.0000

38

38

**

Ml u/07/23

AI S4-1032-225

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST281	758	
108696	146	
110768	62	
118386	55	
118966	68	
121269	427	

ST282	23	
120410	10	
120451	13	

M 122290

x38

AN3C5A

Purchased

No

230

Each

1,302.000

34

34

**

Ml u/07/23

AN3C5A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP001	7	
115835	7	
ST350	1295	
116419	28	
117343	13	
117764	7	
117872	2	
119749	23	
120423	28	
121068	12	
121255	500	
121444	182	
121708	500	

x34

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 85145**Parent Item:** D350-636-013**Parent Item Name:** Skidtube LH***85145***
D350-636-013**Start Date:** 04/06/2012**Required Date:** 18/06/2012**Start Qty:** 1.00**Required Qty:** 1.00

AN3C6A

Purchased

No

230

Each

451.0000

4

4

**

JSL

1107123

AN3C6A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	1	
111982	1	
ST351	450	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422	13	
119449	21	
120423	3	
120693	158	
<u>121682</u>	200	X-1

AN6C44A

Purchased

No

230

Each

86.0000

4

4

**

JSL

1107123

AN6C44A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	2	
103964	2	
ST343	84	
121013	11	
121167	13	
<u>121440</u>	50	X4
<u>121689</u>	10	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

68.0000

1

1

**

M 1107123

AN8C35A

BOLT

Location	Loc Qty	Loc Code
FP002	67	
	115960	
	118286	
	121275	
ST346	1	X1
	114442	
	115188	
	115960	

AN960C10L

NAS1149C0332

Purchased

No

230

Each

0.0000

38

38

M 1122063** C 1107123

*AN960C10I *

washer

D2745

Manufactured

No

230

Each

122.0000

8

8

**

M 1103127

D2745

Bushing

Location	Loc Qty	Loc Code
FP	6	B 85416 X 8
	79518	
	6	
	FP001	
FP001	116	
	69529	
	1	
	76142	
83260	1	
	114	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230

Each

9.0000

1

1

**

Hl 1367123

D3488-041

Blade Fitting Assembly, LH

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	9	1385807
61689	1	
82271	8	

D3492-1

Manufactured No

230

Each

257.0000

8

8

**

Hl 11607123

D3492-1

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	242	
69531	8	
74444	2	
76235	4	
<u>83259</u>	228	X0
FP-A	15	
83098	15	

D3492-5

Manufactured No

230

Each

161.0000

8

8

**

Hl 12107123

D3492-5

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
fpa	161	
<u>83100</u>	60	
83530	101	V6

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 85145***85145***
D350-636-013**Parent Item:** D350-636-013**Parent Item Name:** Skidtube LH**Start Date:** 04/06/2012**Required Date:** 18/06/2012**Start Qty:** 1.00**Required Qty:** 1.00

D3535-25

Manufactured No 230 Each 34.0000 1 1
*****D3535-25***

Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	34	
62233	1	
81357	1	
82156	2	
83387	17	
83899 ✓	13	

D3536-25

Manufactured No 230 Each 28.0000 1 1
*****D3536-25***

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	28	
83391 ✓	12	
83900 ✓	16	

D3537-1

Manufactured No 230 Each 83.0000 3 3
*****D3537-1***

Wearpad

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG 85457.	10	
79833	10	
FP002	73	
69817	5	
81360	14	
81362	19	
83254	1	
83255	3	
84091	31	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3631-1

Manufactured	No	230	Each	347.0000	8	8
--------------	----	-----	------	----------	---	---

**

D3631-1

Washer

Bk 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	332	
81874 ✓	2	
83588 ✓	330	<i>S-</i>
ST072	15	
68062	2	
75548	13	

D3672-13

Purchased	No	230	Each	774.0000	2	2
-----------	----	-----	------	----------	---	---

**

D3672-13

Phenolic Washer

SF

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST060	774	
54363	774	<i>2X</i>

D3791-1

Manufactured	No	230	Each	17.0000	1	1
--------------	----	-----	------	---------	---	---

**

D3791-1

Wearplate

Bk 12-9-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	17	
62239 ✓	2	
83392 ✓	15	<i>1</i>

D3793-1

Manufactured	No	230	Each	28.0000	1	1
--------------	----	-----	------	---------	---	---

**

D3793-1

Wearshoe

Bk 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	28	
82171 ✓	2	
83393 ✓	13	<i>1</i>
83903	13	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

D3793-3

Manufactured No 230 Each 28.0000 1 1 **

D3793-3

Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	28	
83394 ✓	16	
83901	12	

D3794-1

Manufactured No 230 Each 26.0000 1 1 **

D3794-1

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	6	
82167	6	
FP002	20	
83395 ✓	20	

D3794-3

Manufactured No 230 Each 23.0000 1 1 **

D3794-3

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	21	
83396 ✓	21	
FP002	2	
74530	2	

BL 12-7-25

BR 12-7-25

BL 12-7-25

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 11

Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

MS21043-6

Purchased

No

230

Each

618.0000

4

4

**

MS21043-6

NUT

BL 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST301	598	
117887	2	
118384	96	H
120308	500	

MS21083C8

Purchased

No

230

Each

81.0000

1

1

**

MS21083C8

NUT

BL 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
304	75	
121185✓	29	I
121349	46	
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
121524	1	

NAS1149C0832R✓

Purchased

No

230

Each

257.0000

1

1

**

NAS1149C0832R

WASHER

BL 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST297	257	
114915✓	257	I

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 12

Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased

No

230

Each

146.0000

4

4

**

*NAS1515H3I *

WASHER

BD 12-7-25

<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>
FG	122151	40	
	102472	40	
ST277		106	
	118686	3	
	119438✓	1	H.
	120360	11	
	121243	2	
	121556	89	

NAS1611-005

Purchased

No

230

Each

180.0000

8

8

**

NAS1611-005

O-RING

BL A-7 05

<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>
FP001		180	
	106099✓	18	
	114220✓	78	8.
	119438	44	
	121415	40	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

188.0000

8

8

**

NAS1611-010
O-RING

BL 12-7-25

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001 /22151	188	8.
110915	14	
117460	8	
118077	1	
118612	3	
119438	47	
121259	2	
121415	4	
121584	59	
121723	50	

AN8C21A
BOLT

Purchased

No

250

Each

57.0000

2

2

**

AN8C21A

m 12204 sp

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST343	57	
118758	3	
121167	4	
121275	50	

D2741
Blade, 350 Skidtube

Manufactured

No

250

Each

20.0000

1

1

**

*B83/35 u**SP 12-7-26.*

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST	-10	
ST466	30	
71856	1	
79516	19	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 14

Work Order ID: 85145

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

85145
D350-636-013

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

250

Each

81.0000

2

2

**

m/22/41 sp
6

MS21083C8
NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

304	75	
121185	29	
121349	46	
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
121524	1	

NAS1149D0863J

Purchased

No

250

Each

251.0000

2

**

sp 12-7-26
6

NAS1149D0863.J
WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST298	251	
118078	34	
119307	17	
120308	100	
121556	100	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 85145 MLJ
12/06/04

RELEASED
05-09-2014

- GENERAL NOTES:**

 - 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
 - 2) FINISH:
 - ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
 - 3) BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
 - 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 6) BREAK SHARP EDGES: N/A
 - 7) IDENTIFICATION: N/A
 - 8) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
 - 9) WELD PER DART QSI 004
 - 10) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
 - MINIMUM YIELD TENSILE STRENGTH = 35 KSI
 - MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
 - 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
 - 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL 
 - 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL 

F	INCORPORATE DS1 9413. QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13-35 (ZN C8-1); D3794-1/3 REPLACES D3536-13-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARHOSE HOLES UNDER FWD/RAFT SADDLE REMOVED 18 (B8-1). ADD NOTE 12 AND 13. QTY UPDATED (ZN B8-1); D4985-04-12 HARDWARE RELOCATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A8-1); REASON REF NCH 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES, ADD NUMBER OF SLOTS, CHANGE INSERTS. ADD D3631-1, REMOVE QTY (3) (ZN C8-1) (16), REMOVE QTY (10) NAS1515M8L, REMOVE D2742, QTY (2) ANG80C5616, REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEQ 9133N9157	PH	06.01.05
C	ADD D2750-3/D2750-4, INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV	DESCRIPTION	BY	DATE
DESIGN	<u>RS</u>	DART AEROSPACE USA, INC.	
DRAWN	<u>RS</u>	PORT HADLOCK, WA	
CHECKED	<u>S</u>	DRAWING NO.	REV. R
MFG APPR.	<u>AC</u>	D2750	SHEET 1 OF 1
APPROVED	<u>AM</u>	TITLE	SCALE
DE APPR.	<u>AM</u>	350 SKIDTUBE ASSEMBLY	
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DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D

C

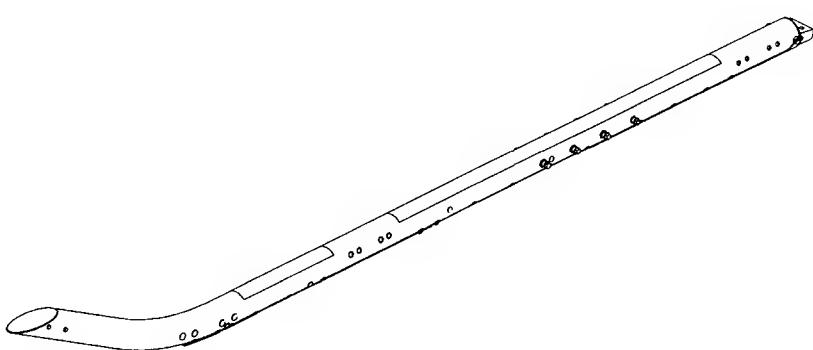
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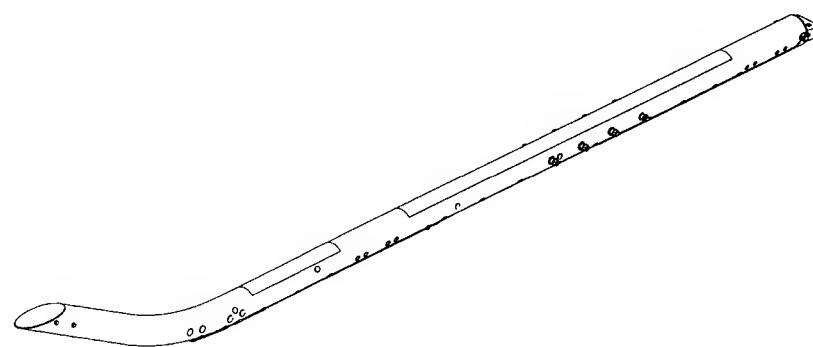
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A

A



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

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8/22/14

DESIGN	<i>PW</i>	DART AEROSPACE USA, INC.
DRAWN	<i>AM</i>	PORT HADLOCK, WA
CHECKED	<i>AM</i>	DRAWING NO.
MFG. APPR	<i>AM</i>	D2750
APPROVED	<i>AM</i>	REV. F
DE APPR.	<i>AM</i>	SHEET 2 OF 11
DATE	08.07.16	TITLE
		350 SKIDTUBE ASSEMBLY
		NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

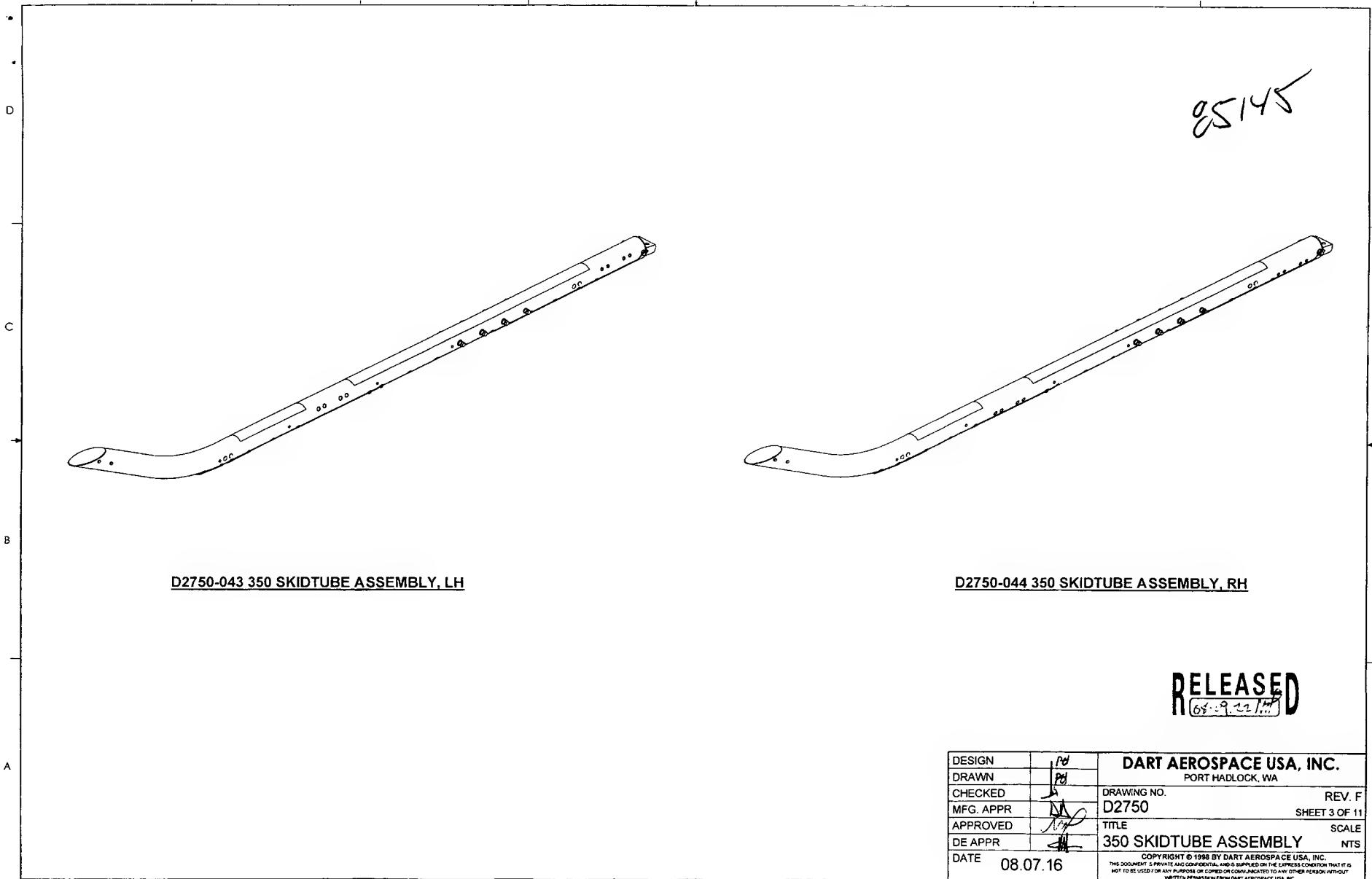
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



DESIGN	<i>Pd</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN	<i>Pd</i>	DRAWING NO. D2750
CHECKED	<i>MM</i>	REV. F
MFG. APPR	<i>MM</i>	SHEET 3 OF 11
APPROVED	<i>MM</i>	TITLE
DE APPR	<i>MM</i>	SCALE NTS
DATE	08.07.16	350 SKIDTUBE ASSEMBLY

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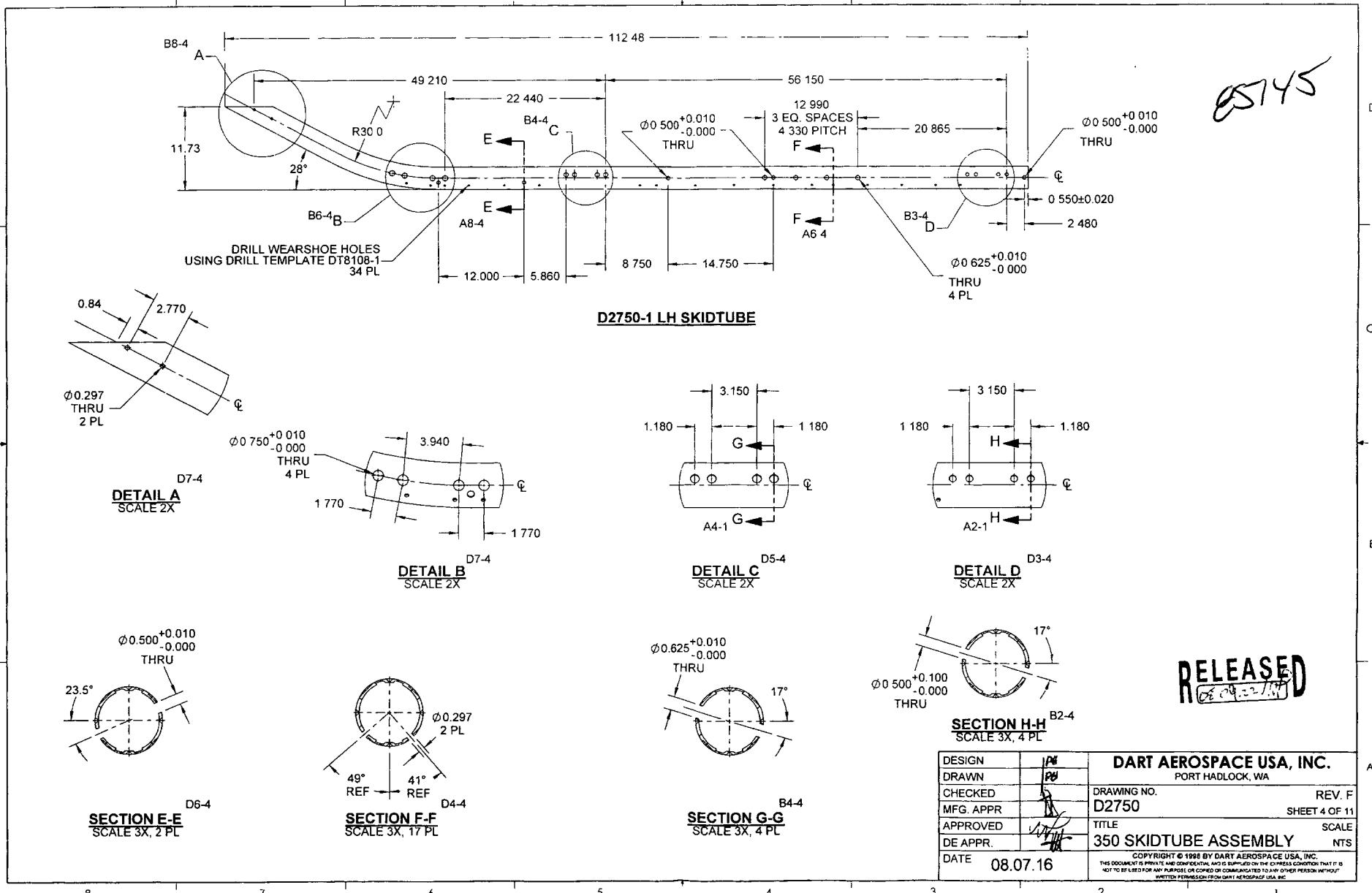
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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06-09-2014

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

FORT RUCKER, AL

REV. F
MAY 1954

SHEET 4 OF 11

1050 SWIRL TUBE ASSEMBLY

350 SKID TUBE ASSEMBLY NTS

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1

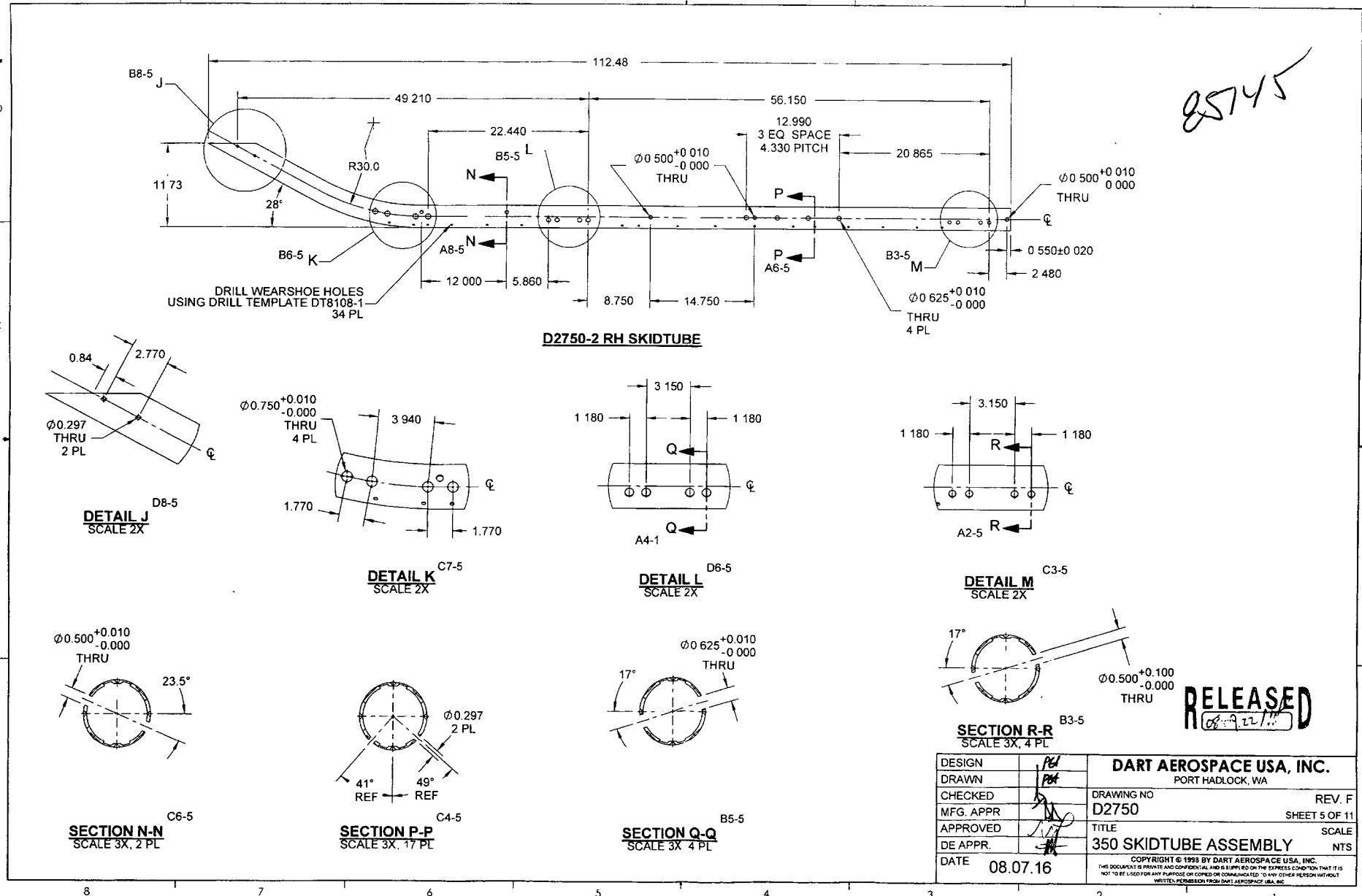
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DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	184	DART AEROSPACE USA, INC.
DRAWN	PAE	PORT HADLOCK, WA
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MFG. APPR		D2750
APPROVED		REV. F
DE APPR.		SHEET 5 OF 11
DATE	08.07.16	TITLE
		350 SKIDTUBE ASSEMBLY
		NTS

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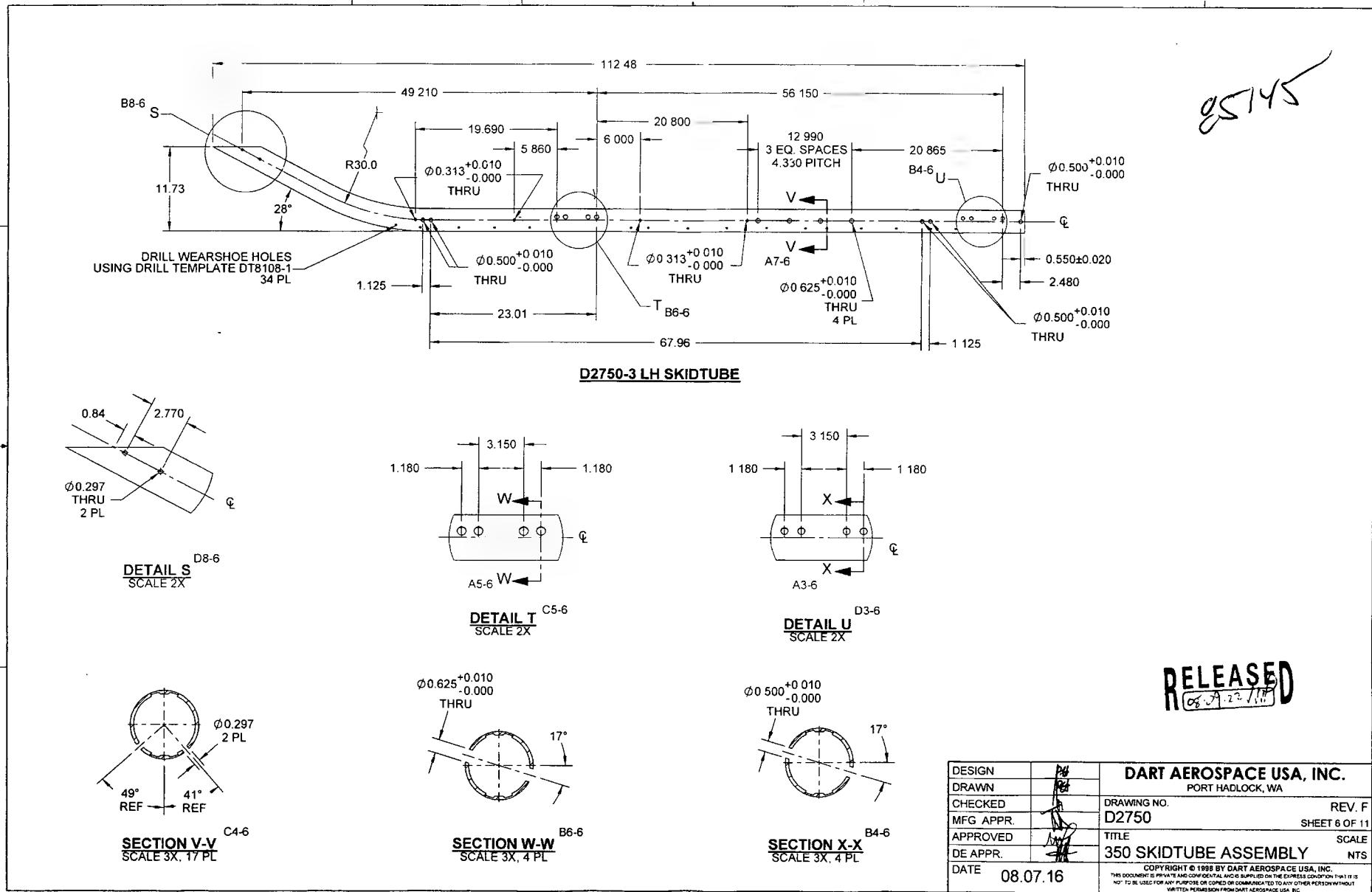
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DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



85145

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08-09-2014

DESIGN	<i>PB</i>	DART AEROSPACE USA, INC.		
DRAWN	<i>PB</i>	PORT HADLOCK, WA		
CHECKED	<i>JL</i>	DRAWING NO.	REV. F	
MFG APPR.	<i>SJ</i>	D2750	SHEET 6 OF 11	
APPROVED	<i>SJ</i>	TITLE	SCALE	
DE APPR.	<i>SJ</i>	350 SKIDTUBE ASSEMBLY	NTS	
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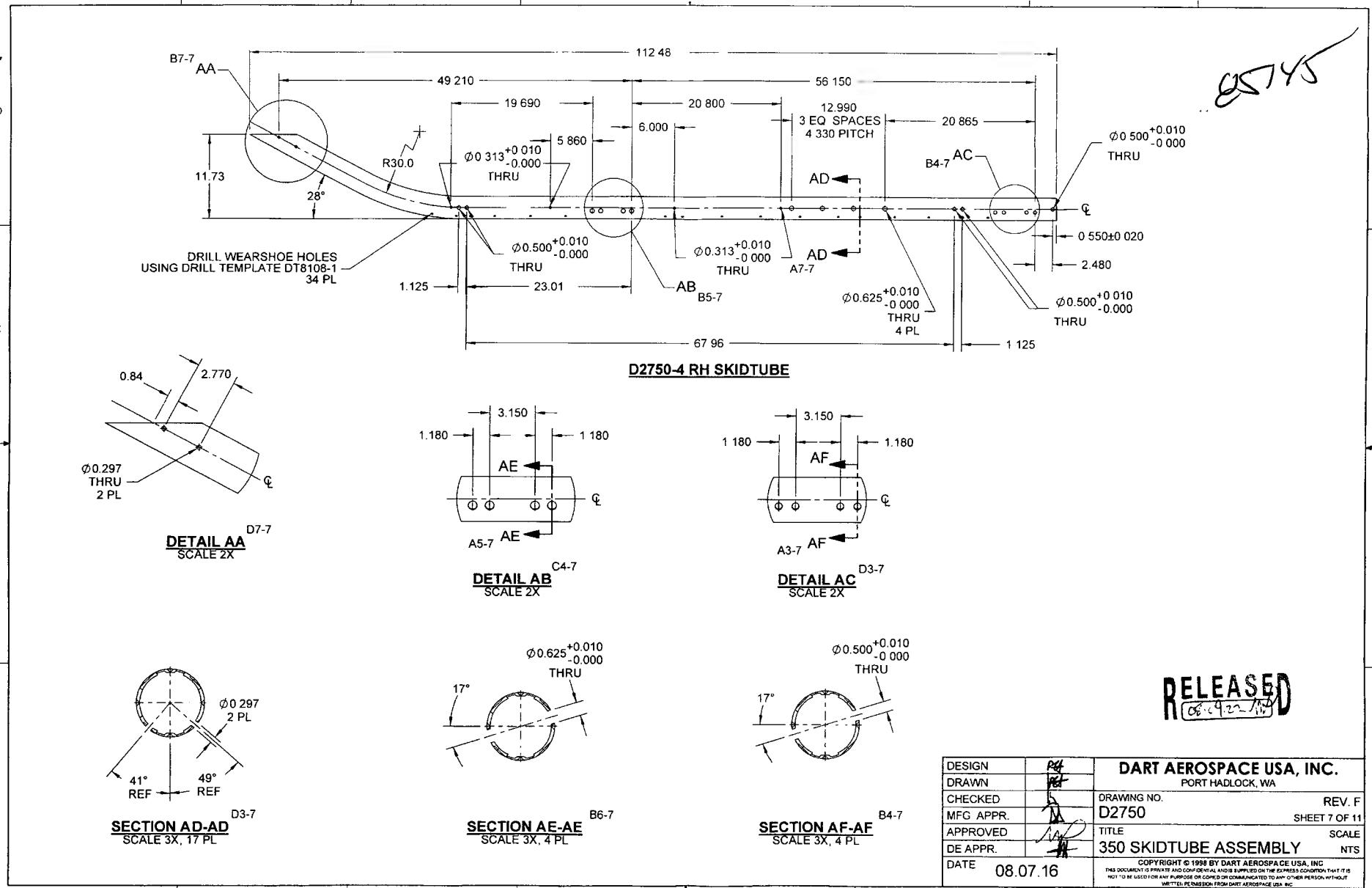
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	PC	DART AEROSPACE USA, INC.
DRAWN	PC	PORT HADLOCK, WA
CHECKED	PC	DRAWING NO. REV. F
MFG APPR.	PC	D2750 SHEET 7 OF 11
APPROVED	PC	TITLE
DE APPR.	PC	SCALE
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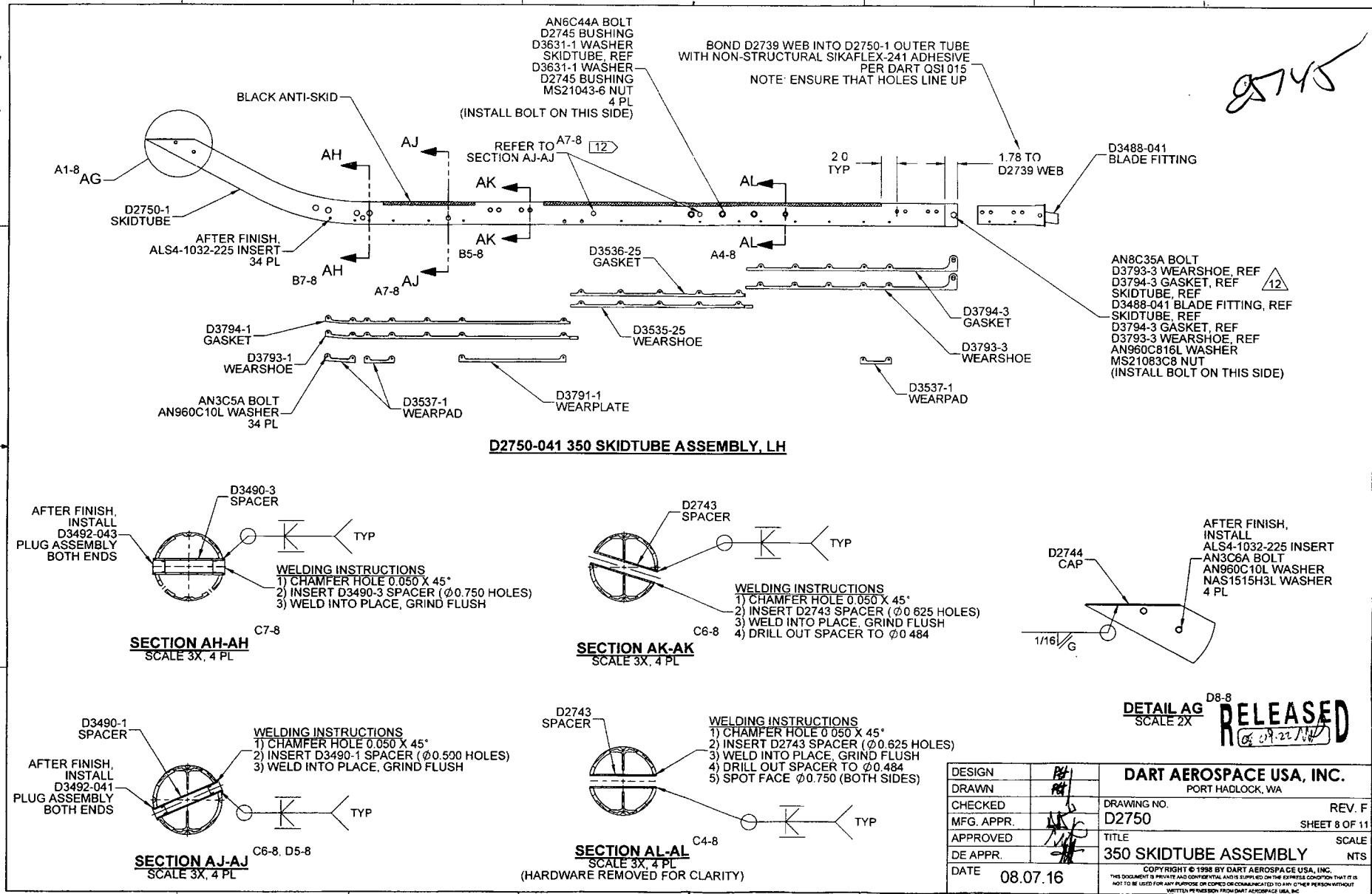
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



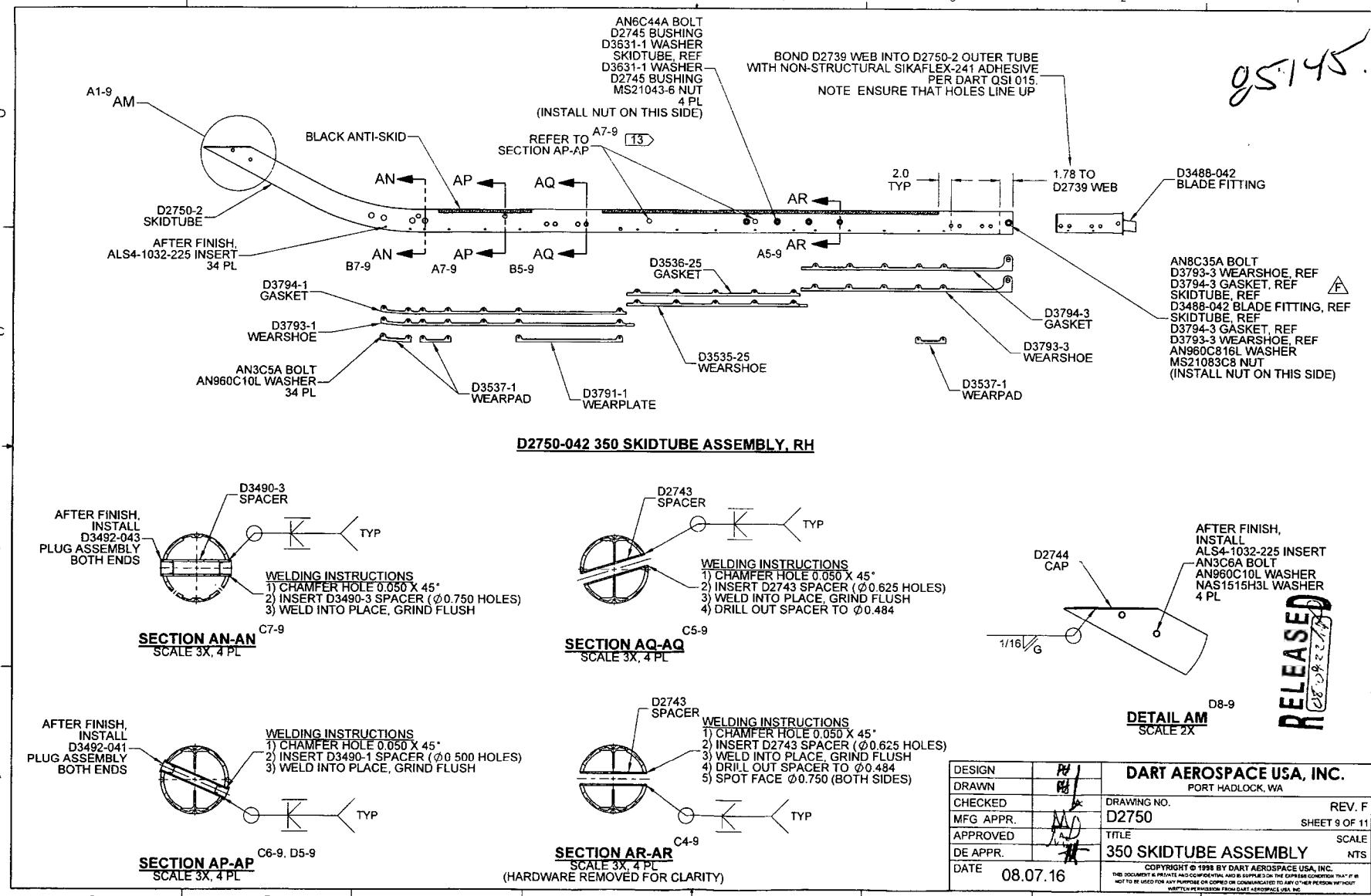
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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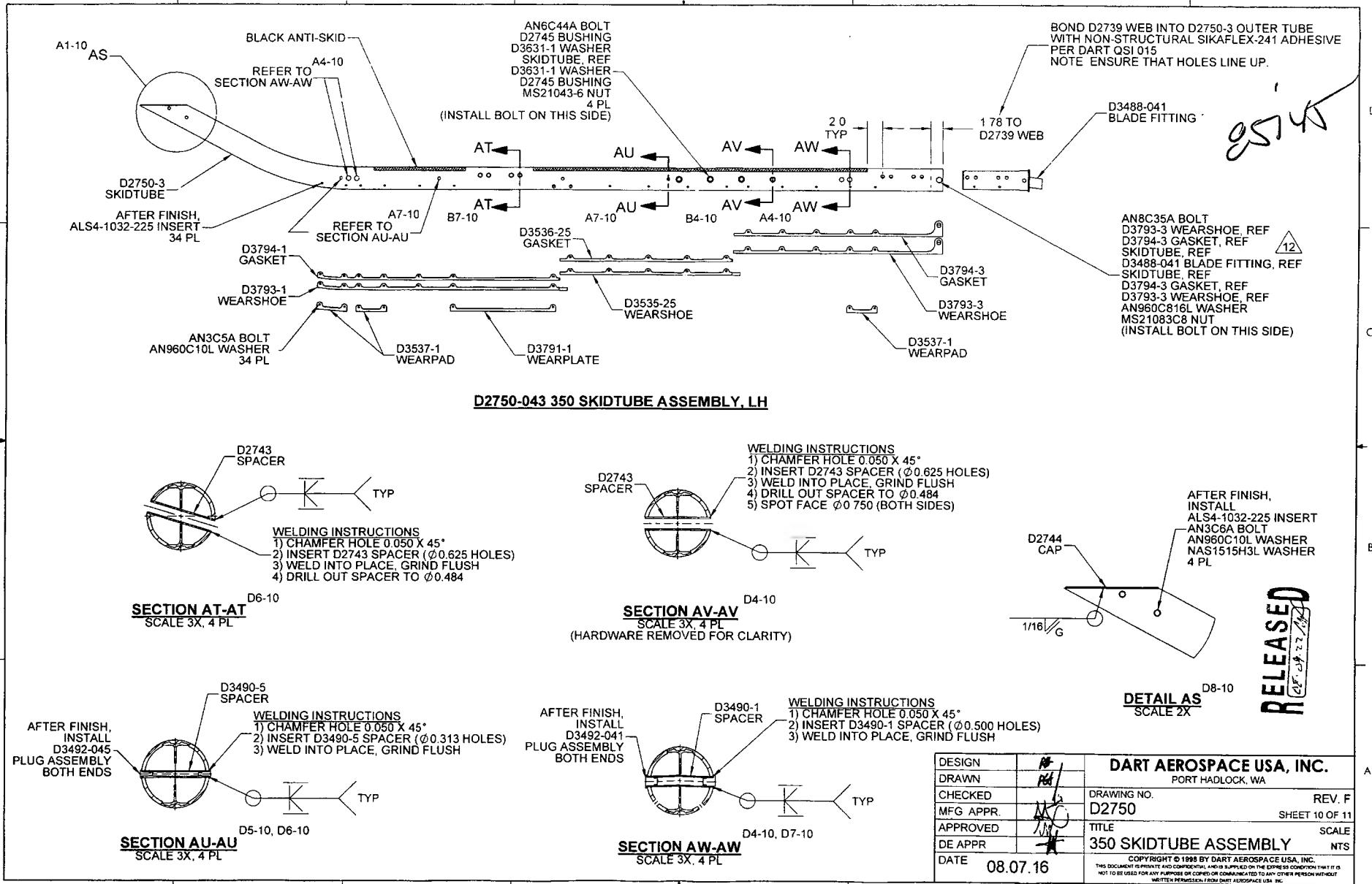
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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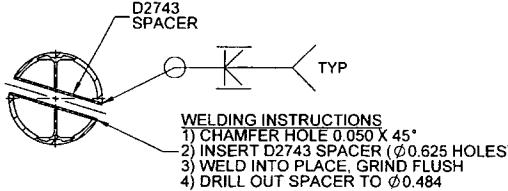


BOND D2739 WEB INTO D2750-3 OUTER TUBE
WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE
PER DART QSI 015
NOTE ENSURE THAT HOLES LINE UP.

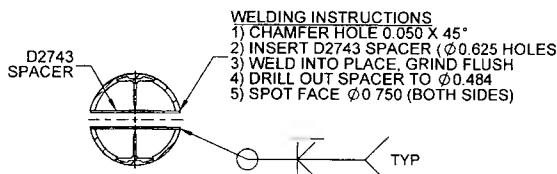
AN8C35A BOLT
 D3793-3 WEARSHOE, REF
 D3794-3 GASKET, REF

 SKIDTUBE, REF
 D3488-041 BLADE FITTING, REF
 SKIDTUBE, REF
 D3794-3 GASKET, REF
 D3793-3 WEARSHOE, REF
 AN960C816L WASHER
 MS21083C8 NUT
 (INSTALL BOLT ON THIS SIDE)

D2750-043 350 SKIDTUBE ASSEMBLY, LH

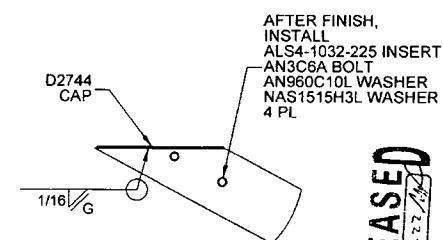


D6-10

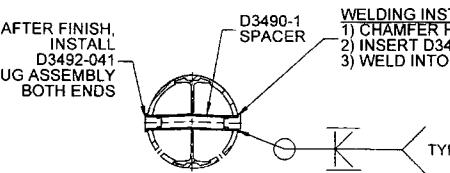
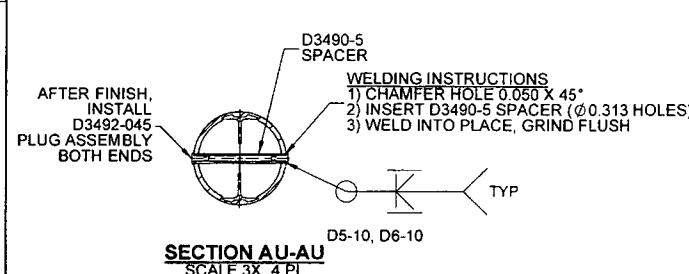


WELDING INSTRUCTION

- 1) CHAMFER HOLE 0.050 X 45°
 - 2) INSERT D2743 SPACER (ϕ 0.625 HOLES)
 - 3) WELD INTO PLACE, GRIND FLUSH
 - 4) DRILL OUT SPACER TO ϕ 0.484
 - 5) SPOT FACE ϕ 0.750 (BOTH SIDES)



RELEASED
CLERK 22



SECTION AW-AW

DESIGN	<i>AB</i>	DART AEROSPACE USA, INC.		
DRAWN	<i>P&G</i>	PORT HADLOCK, WA		
CHECKED		DRAWING NO.	REV. F	
MFG APPR.	<i>MAC</i>	2750	SHEET 10 OF 11	
APPROVED	<i>WJ</i>	TITLE	SCALE	
DE APPR	<i>WJ</i>	350 SKIDTUBE ASSEMBLY	NTS	
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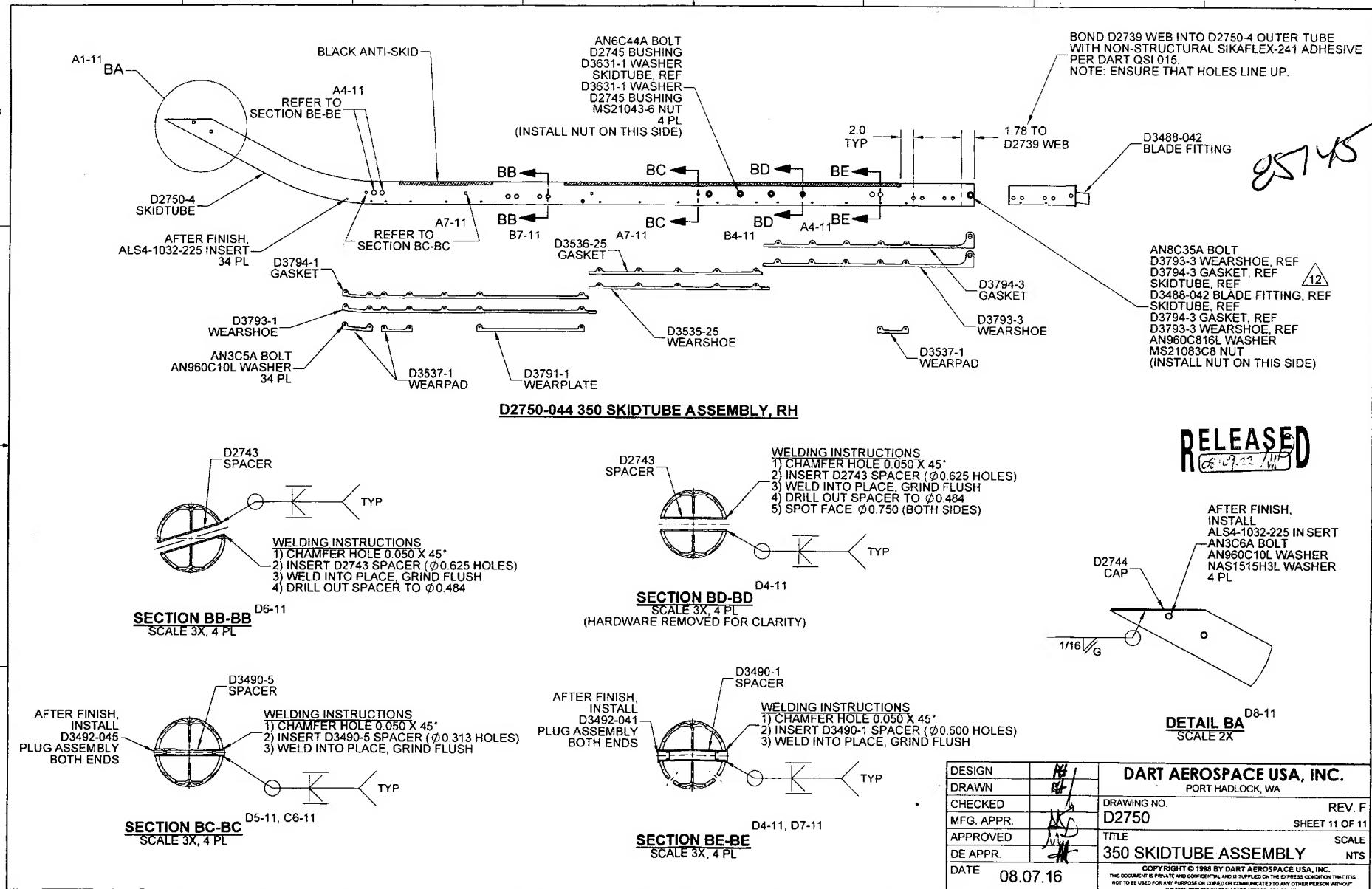
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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DESIGN	<i>RE</i>	DART AEROSPACE USA, INC.			
DRAWN	<i>RE</i>	PORT HADLOCK, WA			
CHECKED	<i>RE</i>	DRAWING NO.			
MFG. APPR.	<i>RE</i>	REV. F			
APPROVED	<i>RE</i>	D2750			
DE APPR.	<i>RE</i>	SHEET 11 OF 11			
DATE	08.07.16	TITLE			
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date					

NOTE: Date & initial all entries

NO. 298

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: 87012
Part #: A350-63G-01H
Description: Skid tube
Welding Process: Tig[] Mig[]
Base material: Alum. min.
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Incomplete Penetration:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Incomplete Fusion:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Cracks:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Overlap (cold lap)	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Undercut:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Pin holes:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Porosity (surface):	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Coloration:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]
Burn through:	pass[<input checked="" type="checkbox"/>]	fail[<input type="checkbox"/>]

Qualifier David Elliott Date of Test Coupon 12-07-23

Welder Barclay Elliott Date of Test Coupon 12-07-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld